3. Neurotonic Pupil Reactions. J. Piltz.

1. *Pupillary Changes.*—Rothman reports a case of a girl twelve and one-half years of age who had occasional periods of unconsciousness during childhood. At five years of age she developed periodical attacks of migraine. After one of these headaches it was noticed that the right pupil was dilated at maximum and was absolutely immobile. The left pupil was normal. Potassium iodide was given. After a period of five months there was a slight reaction of the pupil in accommodation and convergence. During the whole period of observation, three and one-half years, no reaction to light was observed. In the course of time the right pupil regained its normal size, but would remain contracted 30 to 40 seconds after accommodation and convergence. The case represents an isolated paralysis of the right sphincter iridis, the lesion probably being a small hemorrhage in the oculomotor nucleus.

2. *Crushing the Spinal Roots.*—Bickeles crushed the anterior and posterior spinal roots of dogs either with pincers or ligatures for five minutes. The dogs were killed from seven weeks to two and one-half months after operation. Examination showed in the posterior roots a large number of fine regenerated fibers, the number depending upon the length of time elapsing after the operation. Bickeles also found what he believed to be regenerated nerve fibers in the intramedullary portion of the compressed posterior roots. This, however, was not very active, probably due to the increase of neuroglia tissue and a sclerosis. Examination of the posterior roots of dogs who died two to two and one-half weeks after operation showed an absence of centrifugal fibers. In the anterior roots a band of fibers was found which were traced as coming from the posterior roots. Degeneration was always on the same side as the injury.

3. *Neurotonic Pupil Reactions.*—Piltz discusses the inportance of pupillary phenomena. In 37 cases of progressive paralysis, 11 did not respond to light on either side; 10 in whom the light reaction failed in one and was poor in the other; 7 in whom the reaction was poor in both sides; 4 in which only one pupil reacted poorly and 5 in whom the light reaction was normal. In 63 cases of tabes, in 37, both pupils failed to react to light; in 6 the pupils on one side failed, the other being slow; in 15 both pupils reacted slowly; in one, the pupil on one side reacted poorly, the other normally, an din 2 cases the light reactions were normal. Impairment and reaction manifests itself either that the pupil does not contract as much as it should or that it does not contract as rapidly as normally. It also manifests itself in a persistence of the narrowing of the pupil for some time after reaction. Four cases are recorded with the later phenomenon.

Weisenburg (Philadelphia).

MISCELLANY

A Note on Traumatic Syringomyelia. Alfred Gordon (Philadelphia Medical Journal, May 9, 1903).

The writer reports a case of a woman aged forty years who, ten years before, had slipped and fallen on her back. This was followed by numbness and a sensation of pins and needles, and burning and aching in both hands. The pain disappeared but the numbness persisted. The hand would not be pained by burning, though covered by blisters. Three years ago a red swelling on the palm of the hand developed, which increased. A subsequent dislocation of the arm was painless. The motor power in both lower and right upper extremities was normal. The left arm was weaker and larger than the right, each finger being larger than the corresponding finger of the right hand. The subcutaneous tissue seemed hypertrophied. No hysterical stigmata were noted. The skin was soft and thickened. The reflexes and reaction to Farradism were diminished on the left arm.

Anesthesia of side of face and head was present. Temperature sense (heat and cold) were lost over the whole left arm and half the thorax to sternum and the middle line of the spine. Loss of pain sense was identical with thermo-anesthesia. Very little muscular wasting was present. The case was evidently a typical sensory dissociation characteristic of syringomyelia, also trophic changes of the tissue underlying the epidermis. The cause was probably the traumatism causing a hemorrhagic focus, developing into a gliosis or cavity of the spinal cord. Trophic disturbance in syringomyelia of the nature of edematous swelling of paralyzed limbs are not rare. A hard edema due to hyperplastic process in the subcutaneous tissue was described by Marinesco under the name "main succulente." The vasomotor and trophic centers for the bones and integument are situated in the gray matter of the posterior cornua, about the eighth cervical.

NOYES (New York).

DO OUR PRESENT WAYS OF LIVING TEND TO THE INCREASE OF CERTAIN FORMS OF NERVOUS AND MENTAL DISORDCR? Charles E. Atwood (New York Medical Journal, June 13, 1903).

Insanity is increasing slightly, especially degenerative types. Neurasthenia is increasing. This increase is found mostly in the immigrant population, 75 per cent of the insane of the State and 80 per cent of the cases of neurasthenia at the Vanderbilt Clinic being either foreign born or of foreign parentage.

Our present methods of living entail an increased mental strain, the number of sensory impressions and variety of ideas forced upon us by our increasing interests permit scarcely time for the reception of impressions, and no time for their proper assimilation. Emotional stresses, e.g., those caused by sudden and great reverses of fortune; profound impressions induced by fanatical doctrines, impressions induced by certain lurid daily newspaper are deleterious to the neurotic. Over indulgence in eating and drinking tends to arterial sclerosis. Tendency to auto-infection is assisted by irregular living, and auto-infection is a recognized cause of certain forms of insanity and certain neuroses. The immigrant suffers the most on account of competition with a superior race, deficient alimentation and resultant enemia, other concomitants of poverty, and faulty hygienic conditions. The consumption of alcohol per capita in this country has increased, and our women are drinking more and more each year. This has a tendency to establish a faulty heredity and induce a strong predisposition to nervous disorders.

AUTHOR'S ABSTRACT.

BRACHIAL PARALYSIS—POST NARCOTIC. F. J. Cotton and S. W. Allen (Boston Medical Journal, May 7, 1903).

The writers report four cases of post-anesthetic paralysis, and collect thirty from general literature. The patient is anesthetical with the arms drawn up over the head, and after recovery one or both arms are found paralyzed. There is little or no pain and slight sensory disturbance. The muscles of the shoulder and arms are affected in a varying degree—sometimes all are involved; sometimes the shoulder is spared, and the hand and arm muscles are alone affected. In a few days there is beginning of return of function, more usually in the hand, then a slower return of power in the extensors to the deltoid and to the rotators of the shoulder. As the function returns many of the cases present a paralysis approximately of the "Erb" type (deltoid, biceps, brachialis anticus and supinator longus). In a very few cases there is involvement of the sympathetic root communicating with the first dorsal root, signified by pupillary and other ocular changes. Later, soreness of the nerve trunks and of the muscles may appear. Reflexes are usually normal. Electrical tests rarely show a partial reaction of degeneration; usual reactions are normal. There are three